

August 29, 2025

Brandon Bushnell
WRC Engineer
San Diego Regional Water Quality Control Board
2375 Northside Drive, Suite 100
San Diego, CA 92108

Re: COMMENTS ON TENTATIVE ORDER NO. R9-2025-0003 WASTE DISCHARGE REQUIREMENTS FOR THE EAST COUNTY ADVANCED WATER PURIFICATION PROJECT DISCHARGES TO LAKE JENNINGS AND SYCAMORE CREEK

Dear Mr. Bushnell:

The East County Advanced Water Purification Joint Power Authority (JPA) appreciates the opportunity to review the Tentative Order No. R9-2025-0003, NPDES No. CA900001, Waste Discharge Requirements for the East County Advanced Water Purification Project Discharges to Lake Jennings and Sycamore Creek (Tentative Order/Permit). We have organized our comments into two categories. Table 1 (below) lists comments that we believe are possible errors in the Tentative Order that require correction. Table 2 lists items within the Permit that the JPA requests that the Regional Water Board revise.

Table 1 – Possible Errors or Items that Require Correction
Tentative Order No. R9-2025-0003

Page Number	Section	Comment
4	2.2.	In the last sentence of the paragraph, remove reference to Attachment G. This attachment does not exist.
6	Table 3	Remove Footnote 2 from the units for the mass loading for TSS (the footnote is already applied to the average monthly and average weekly columns).
6	4.1.1.4.1.	UVT is measured at INT-010 and not INT-012A to INT-012C as point 4.1.1.4. indicates. Please correct. Suggested language (new text underlined): "UV transmittance minimum of 95% <u>(at INT-010)</u> "
18	4.3.1.6.	Missing word: Add "are" between "Facility" and "operated" so that it reads "The Discharger must ensure that all treatment processes at ECAWP facility <u>are</u> operated...."
22	4.3.6.3.1.	Missing word: Add "once" between "least" and "every" so that it reads "The turbidity must be measured continuously at least <u>once</u> every 15 minutes"
24	4.3.6.4.1.	In the first sentence where it says "(at monitoring locations INT-008)", change to singular (i.e., "location").
46	5.3.4.8.1.	In the last sentence of the paragraph, the reference to section 6.3.4.8.5. should be 5.3.4.8.5.

Page Number	Section	Comment
A-12	Table A-1	Since this table lists the different compounds that are 2,3,7,8-hexa CDFs (i.e., 1,2,3,4,7,8-hexa CDF; 1,2,3,7,8,9-hexa CDF, etc.), the name should be CDF (singular) instead of CDFs (plural). This applies to 1,2,3,4,7,8-hexa CDFs; 1,2,3,6,7,8-hexa CDFs; 1,2,3,7,8,9-hexa CDFs; 2,3,4,6,7,8-hexa CDFs.
E-9	Table E-3	Revise the monitoring location for turbidity. Turbidity should be monitored at INT-005A to INT-005F (not INT-005E as currently shown in the tentative order).
E-10	Table E-3, Footnote 8	Correct the following typos: monitoring location name (it should be EFF-001A), the word "measure" should be "measured".
E-19	Table E-12	Add the following parameters that are in the category "remaining CTR parameters" but are missing from this table: hexachlorobutadiene and methyl bromide.
E-21	Table E-12	Chromium hexavalent is included in Table 5 as a pMCL with effluent limitations. Remove chromium hexavalent from table E-12 and add it to table E-05, which corresponds to parameters with pMCLs.
E-23	Table E-14	Add footnote 1 to the total coliform parameter or provide a method requirement for total coliform.
E-23	Table E-15	Add un-ionized ammonia to this table. This parameter is required at EFF-002B per Table 12.
E-24	3.3.7.1.	In the first sentence of the paragraph "3.3.7.1. If a constituent's primary MCL or AL- for lead and copper is exceeded, ...", remove the dash and write "for lead and copper" in between parenthesis.
E-24	3.3.7.1.	In the last sentence of the paragraph, where it says "must notify the DDW, Helix Water District utilizing the augmented reservoir, and the San Diego Water Board ", remove "utilizing the augmented reservoir" from the text since it is not necessary in the context of the statement.
E-36	3.4.5.	Correct typo. The text says "(Discharge Point 001)". It should be "(Discharge Point 001)"
E-37	3.5.1.	Revise the frequency for monitoring chronic toxicity for the discharge points 001 and 002 to quarterly as stated in tables E-13 and E-15 and Section 3.5.3.
E-47	Table E-26	Following the requirements for other constituents to which Footnote 3 applies, revise the monitoring location for silver to be RSW-001 and RSW-002 with Footnote 5 for both locations.
E-79	Table E-33	Revise the due date of the Expanded Local Limits Study Report to be within one year of initiating discharge to match the requirement in Section 5.3.4.8.5.
E-79	Table E-33	In the "Due Date" column for the Initial Investigation TRE Work Plan and for the QAPP, the word "date" is missing after "effective". Add the word "date" so that it reads "effective date".
F-5	2.1.5.	The two places where the text "C's" appears should be changed to "City's".

Page Number	Section	Comment
F-11	3.3.4.3.	In the last sentence of the second paragraph, remove the word "Results" at the very beginning.
F-17	4.2.2.2.	Missing word. Add "be" to the last sentence of the paragraph, so that it reads (new text underlined): "Average monthly BOD5 and TSS concentrations of tertiary treated effluent from the ECWRF are projected to <u>be</u> below 10 mg/L,"
F-72	5.2.5.1.	Correct the text "C's" to be "City's".

Table 2 – Requested Revisions
Tentative Order No. R9-2025-0003

Page Number	Section	Comment
6	4.1.1.4. 4.1.1.4.1. 4.1.1.4.2.	The JPA requests that these bullet points be moved to Section 4.1.2 "Discharge Point No. 002 - Santee Lakes and Sycamore Creek" since they define criteria that apply to discharge point 002.
15	4.1.2.1.	The JPA requests that the effluent limitation for total coliform for the Santee Lakes discharge be applied to monitoring location EFF-001A instead of EFF-002A, including cases when the water is "off specification" for discharge to Lake Jennings. Total coliform is monitored at EFF-001A daily for the Lake Jennings discharge and it is not expected to be different from EFF-002A. Consolidating monitoring at EFF-001A for compliance with the Lake Jennings and Santee Lakes discharges avoids duplicative sampling efforts and costs. Off-specification scenarios can have a short duration and it would be impractical to switch to monitoring location EFF-002A for these cases. If the proposed change in monitoring location is accepted, the following sections of the order should be modified accordingly: Table E-27 Footnote 3, Attachment F Section 4.3.2.1.2.
15-16	Table 12	The JPA requests that the total phosphorus limitation be applied prior to discharge to the Santee Lakes. The JPA is committed to providing product water meeting the 0.025 mg/L total phosphorus limit leaving the treatment facility at EFF-001A. However, meeting the same total phosphorus limitation in EFF-002B at the discharge from Santee Lakes to Sycamore Creek would be very challenging. There are natural processes in the Santee Lakes (i.e., bird and fish activities, aquatic life, algae growth) over which the JPA has no control. Since total phosphorus is not expected to be different between EFF-001A (where compliance is measured for the Lake Jennings discharge) and EFF-002A, the JPA requests that compliance for the total phosphorus effluent limitation for the Santee Lakes discharge be measured at EFF-001A.

E-7	Table E-1	The JPA requests that the definition for EFF-002A be changed to the following to provide clarity since the intent of this location is to represent samples that have undergone post-treatment (i.e., aeration and dechlorination) for Santee Lakes discharges (modified text underlined): "Discharge from <u>post-treatment</u> prior to Pond C or Lake No. 7 at Santee Lakes"
E-2	Attachment E Section 1.3	In the sentence "If an approved drinking water method is not available for the analyte, the Discharger may consider using an analytical method specified in 40 CFR part 136, Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the CWA as amended (40 CFR part 136) or a differing method subject to review and approval by DDW", add "(i.e., <u>primary MCLs, secondary MCLs, ALs, NLs, or DDW specified chemicals</u>)" after analytes. Otherwise, the option to use a 40 CFR 136 method is only allowed for ALs, NLs, and DDW-specified chemicals and excludes pMCLs and sMCLs. Note that there are cases where approved drinking water methods are not available for MCLs.
6	Table 3	The JPA requests removal of the effluent limitation for flow at INT-003 (combined tertiary filter effluent). INT-003 represents an internal point in the treatment process and there are no direct discharges from this location. Although the water recycling facility is designed for an average daily influent flow of 16 MGD, flow at INT-003 will be above that due to internal plant return flows. Tertiary filters feed the Ray Stoyer chlorine contact basin (CCB) and the AWP facility and the JPA will comply with the flow limitation for the Ray Stoyer CCB, Lake Jennings, and Santee Lakes discharges. The flow sent to the AWP facility will be variable throughout the seasons (e.g., in winter on periods of low demand for title 22 recycled water, all the tertiary flow might be directed to the AWP facility).
E-23	Table E-14 and Table E-15	The JPA requests that total chlorine residual monitoring at EFF-002A be removed. The JPA requests clarification for the rationale to monitor total chlorine residual at two locations (EFF-002A and EFF-002B) and whether there is precedent from other projects for this requirement. Total chlorine residual is required to be monitored daily and performing the analysis at the two locations would pose an additional demand on the operations and laboratory staff. Given that no chlorine is added after discharge to the lakes, the JPA requests that total chlorine monitoring and compliance with the corresponding effluent limitation be applied only to EFF-002B.



E-50	Table E-26	The JPA requests that Footnote 3 be updated as follows to reflect the requirements in Section 4.3.7.3. of this Order (new text underlined): <u>"The Discharger, in coordination with Helix WD, must collect monthly samples for no less than 24 consecutive months prior to augmentation of Lake Jennings with advanced treated recycled water. The Discharger, in coordination with Helix WD, must resume sampling one month prior to commencing discharge of advanced treated recycled water to Lake Jennings. Once discharge starts, the Discharger, in coordination with Helix Water District, must conduct monthly monitoring for no less than the initial 24 months of discharge. After the completion of the initial 24 months of discharge, the Discharger, in coordination with Helix Water District, may request to the San Diego Board and DDW for reduced on-going monitoring."</u>
E-50	Table E-26	The JPA and Helix request that the monitoring for <i>E. coli</i> , temperature, dissolved oxygen, pH, electrical conductivity, and turbidity be required at a monthly frequency instead of weekly. The monthly frequency is required in 22 CCR 60320.326 and it is also reflected in Footnote 3 in Table E-26, which applies to these parameters (except pH). These parameters are also required for the monitoring prior to discharge. Helix initiated baseline monitoring per 22 CCR 60320.326 in January 2023 on a monthly frequency for 24 months and this monitoring has been completed. While this monitoring was ongoing, the JPA provided to RWQCB and DDW a memorandum with the data collected from January 2023 to July 2024. These data have been reviewed with RWQCB and DDW staff demonstrating a nutrient limited well mixed reservoir. During this time Helix did not observe adverse biostimulatory effects or algal blooms within the reservoir, which is consistent with Helix's historical observations. Lake Jennings is a terminal reservoir made up of imported water and fully controlled by Helix. This includes over fifty years of aeration to fully mix the reservoir to maintain water quality. The reservoir is not impacted by local conditions or other source waters. Monitoring at a weekly frequency would pose a significant burden on Helix and it would not provide additional benefit for evaluating baseline water quality or assess potential for algal blooms which is reflected in the data already collected and presented to RWQCB and DDW staff. The JPA, in coordination with Helix WD, will resume sampling for these parameters one month prior to discharge to demonstrate consistency of water quality in the previous 24-month sampling period.

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E-50	Table E-26	Footnote 7 indicates that the following parameters shall be monitored in the lake starting the effective date of the order: total nitrogen, chlorophyll a, total and dissolved phosphorus, pH, nitrate nitrogen, nitrite nitrogen, un-ionized ammonia, and total toxins (measured separately): microcystin, cylindrospermopsin, anatoxin. Helix initiated baseline monitoring for total nitrogen, chlorophyll a, total and dissolved phosphorus, pH, nitrate nitrogen, and nitrite nitrogen in January 2023 together with the monitoring required per 22 CCR 60320.326. The baseline monitoring was conducted for 24 consecutive months on a monthly basis. Helix also collected baseline un-ionized ammonia data in a separate monitoring campaign from June 2021 to June 2022. The baseline monitoring provided a large amount of data and sufficient evidence to demonstrate that the reservoir is nutrient limited and has low algal bloom potential. Helix will resume the monitoring for 22 CCR 60320.326 a month prior to the start of the discharge as required by DDW (and reflected in Section 4.3.7.3 of the Tentative Order) and would like to request that the same timeline be applied to the constituents included in Footnote 7 (i.e., total nitrogen, chlorophyll a, total and dissolved phosphorus, pH, nitrate nitrogen, nitrite nitrogen, and un-ionized ammonia), with the exception of total toxins. Total toxins monitoring was not included in the baseline monitoring already completed by Helix. For this parameter, Helix will start monitoring on the effective date of the Order. The JPA requests confirmation that the requirement for microcystin refers to "total microcystins".
E-51 & E-57	Table E-27 and Table E-28	The JPA requests that for the phosphorus series requirement at the receiving water locations for the Santee Lakes discharge, total orthophosphate be measured in lieu of dissolved orthophosphate. Measuring total orthophosphate provides a more conservative measurement as it is representative of dissolved and suspended orthophosphate while allowing for a more streamlined sample collection process as it removes the need for filtration.

Sincerely,

Kyle Swanson
CEO/General Manager for Padre Dam,
Administrator for the East County AWP JPA

